

IN THE CLAIMS:

The claims are presented as follows:

1. (Original) A medical system, comprising:

a first lead including a first electrode, a second electrode, a first insulated conductor, a second insulated conductor, a connector terminal, and an auxiliary connector port; the auxiliary connector port including a connector contact and the lead connector terminal including a first connector element coupled to the first electrode via the first conductor, a second connector element coupled to the connector contact of the auxiliary port via the second conductor and a third connector element;

a second lead including an electrode adapted for high-voltage therapy, an insulated conductor, and a connector terminal; the connector terminal of the second lead including a connector element coupled to the electrode via the conductor; and

an IMD including a connector port including a first connector and a second connector;

wherein, the auxiliary port of the first lead is adapted to engage the connector terminal of the second lead thereby coupling the connector element of the second lead to the second connector element of the connector terminal of the first lead via the connector contact; and

the connector port of the IMD is adapted to engage the connector terminal of the first lead thereby coupling the first connector element of the first lead, via the first connector, and the second connector element of the first lead, via the second connector, to the IMD.

2. (Original) The medical system of claim 1, wherein the first electrode is adapted for high-voltage therapy.

3. (Original) The medical system of claim 2, wherein:

Appl. No. 10/620,710
Prelim. Amdt. dated June 14, 2004
Page 3

the first lead further includes a third insulated conductor coupling the third connector element of the connector terminal of the first lead to the second electrode of the first lead and the second electrode of the first lead is adapted for low-voltage therapy;

the connector port of the IMD further includes a third connector coupling the third connector element of the connector terminal of the first lead to the IMD when the connector port of the IMD engages the connector terminal of the first lead.

4. (Original) The medical system of claim 2 wherein the second electrode of the first lead is adapted for high-voltage therapy and the second conductor of the first lead further couples the second electrode to the second connector element of the connector terminal of the first lead.

5. (Original) The medical system of claim 4, wherein the first lead further includes a switch adapted to reversibly disconnect the coupling of the second conductor to the second electrode of the first lead.

6. (Original) The medical system of claim 4, wherein

the first lead further includes a third electrode adapted for low-voltage therapy and a third insulated conductor;

the connector terminal of the first lead further includes a fourth connector element coupled to the third electrode via the third insulated conductor; and

the connector port of the IMD further includes a third connector coupling the fourth connector element of the connector terminal of the first lead to the IMD when the connector port of the IMD engages the connector terminal of the first lead.

7. (Original) A medical electrical lead, comprising:

a first electrode;

Appl. No. 10/620,710
Prelim. Amdt. dated June 14, 2004
Page 4

a second electrode;
a first insulated conductor;
a second insulated conductor;
an auxiliary connector port including a connector contact adapted to electrically couple an electrode of a second lead; and
a connector terminal including a first connector element coupled to the first electrode via the first conductor, a second connector element coupled to the connector contact of the auxiliary port via the second conductor and a third connector element.

8. (Original) The medical electrical lead of claim 7, wherein the first electrode is adapted for high-voltage therapy.

9. (Original) The medical electrical lead of claim 8, further comprising a third insulated conductor coupling the third connector element of the connector terminal to the second electrode and the second electrode is adapted for low-voltage therapy.

10. (Original) The medical electrical lead of claim 8, wherein the second electrode is adapted for high-voltage therapy and the second conductor further couples the second electrode to the second connector element of the connector terminal.

11. (Original) The medical electrical lead of claim 10, further comprising a switch adapted to reversibly disconnect the coupling of the second conductor to the second electrode.

12. (Original) The medical electrical lead of claim 10, further comprising:
a third electrode adapted for low-voltage therapy; and
a third insulated conductor; wherein

the connector terminal further includes a fourth connector element coupled to the third electrode via the third insulated conductor.

13. (Original) A medical system, comprising:

a first lead including an electrode adapted for high-voltage therapy, a first insulated conductor, a second insulated conductor, a third insulated conductor, a connector terminal, and an auxiliary connector port; the auxiliary connector port including a first connector contact and a second connector contact and the lead connector terminal including a first connector element coupled to the first electrode via the first conductor, a second connector element coupled to the first connector contact of the auxiliary port via the second conductor and a third connector element coupled to the second connector contact via the third conductor;

a second lead including a first electrode adapted for high-voltage therapy, a second electrode adapted for low-voltage therapy, a first insulated conductor, a second insulated conductor and a connector terminal; the connector terminal of the second lead including a first connector element coupled to the first electrode of the second lead via the first conductor of the second lead and a second connector element coupled to the second electrode of the second lead via the second conductor of the second lead; and

an IMD including a connector port including a first connector, a second connector and a third connector;

wherein, the auxiliary port of the first lead is adapted to engage the connector terminal of the second lead thereby coupling the first connector element of the second lead to the second connector element of the connector terminal of the first lead via the first connector contact and coupling the second connector element of the second lead to the third connector element of the first lead via the second connector contact; and

the connector port of the IMD is adapted to engage the connector terminal of the first lead thereby coupling the first connector element of the first lead, via

Appl. No. 10/620,710
Prelim. Amdt. dated June 14, 2004
Page 6

the first connector, the second connector element of the first lead, via the second connector, and the third connector element of the first lead, via the third connector, to the IMD.

14. (Original) The medical system of claim 13, wherein:

the auxiliary port of the first lead further includes a third connector contact and the first connector element of the first lead is further coupled to the third connector contact via the first conductor of the first lead;

the second lead further includes a third electrode adapted for high voltage therapy and a third insulated conductor;

the connector terminal of the second lead further includes a third connector element coupled to the third electrode of the second lead via the third insulated conductor of the second lead; and

the auxiliary port is further adapted to couple the third connector element of the second lead to the first connector element of the first lead via the third connector contact.

15. (Original) The medical system of claim 14, wherein

the first lead further includes a fourth insulated conductor;

the auxiliary port of the first lead further includes a fourth connector contact;

the connector terminal of the first lead further includes a fourth connector element coupled to the fourth connector contact via the fourth conductor of the first lead;

the second lead further includes a fourth electrode adapted for low-voltage therapy and a fourth insulated conductor;

the connector terminal of the second lead further includes a fourth connector element coupled to the fourth electrode via the fourth conductor;

Appl. No. 10/620,710
Prelim. Amdt. dated June 14, 2004
Page 7

the auxiliary port of the first lead is further adapted to couple the fourth connector element of the second lead to the fourth connector element of the first lead via the fourth connector contact; and

the connector port of the IMD further includes a fourth connector coupling the fourth connector element of the connector terminal of the first lead to the IMD when the connector port of the IMD engages the connector terminal of the first lead.

16. (Original) A supplemental defibrillation lead, comprising:

- a high-voltage electrode;
- a first insulated conductor;
- a second insulated conductor;
- a third insulated conductor;

an auxiliary connector port including a first connector contact adapted to electrically couple a high-voltage electrode of a second lead and a second connector contact adapted to electrically couple a low-voltage electrode of a second lead; and

a connector terminal including a first connector element coupled to the high-voltage electrode of the defibrillation lead via the first conductor, a second connector element coupled to the first connector contact of the auxiliary port via the second conductor and a third connector element coupled to the second connector contact of the auxiliary port via the third conductor.

17. (Original) The defibrillation lead of claim 16, wherein:

the auxiliary connector port further includes a third connector contact adapted to electrically engage a second high-voltage electrode of the second lead; and

the first conductor further couples the first connector element to the third connector contact.

Appl. No. 10/620,710
Prelim. Amdt. dated June 14, 2004
Page 8

18. (Original) The defibrillation lead of claim 17 further comprising a fourth insulated conductor and wherein:

the auxiliary port further includes a fourth connector contact adapted to electrically couple a second low-voltage electrode of the second lead; and

the connector terminal further includes a fourth connector element coupled to the fourth connector contact via the fourth conductor.

19. (New) A medical electrical lead, comprising:

a first electrode;

a connector terminal including a first connector element and a second connector element;

an auxiliary connector port including a first connector contact adapted to electrically couple an electrode of another medical electrical lead;

a first insulated conductor coupling the first electrode to the first connector element; and

a second insulated conductor coupling the second connector element to the first connector contact.

20. (New) The lead of claim 1, further comprising:

a second electrode; and

a third insulated conductor coupling the second connector element to the second electrode.

21. (New) The lead of claim 20, wherein the connector terminal further includes a third connector element and further comprising:

a third electrode; and

a fourth insulated conductor coupling the third connector element to the third electrode.

Appl. No. 10/820,710
Prelim. Amdt dated June 14, 2004
Page 9

22. (New) The lead of claim 21, wherein the connector terminal further includes a fourth connector element and further comprising:

a fourth electrode; and
a fifth insulated conductor coupling the fourth connector element to the fourth electrode.

23. (New) The lead of claim 19, wherein the connector terminal further includes a third connector element and further comprising:

a second electrode; and
a third insulated conductor coupling the third connector element to the second electrode.

24. (New) The lead of claim 23, wherein the connector terminal further includes a fourth connector element and further comprising:

a third electrode; and
a fourth insulated conductor coupling the fourth connector element to the third electrode.

25. (New) The lead of claim 19, wherein the auxiliary port further includes a second connector contact adapted to couple a second electrode of the other medical electrical lead and further comprising a third insulated conductor coupling the first connector element to the second connector contact.

26. (New) The lead of claim 25, wherein the connector terminal further includes a third connector element and the auxiliary port further includes a third connector contact adapted to couple a third electrode of the other medical electrical lead and further comprising a fourth insulated conductor coupling the third connector element to the third connector contact.

Appl. No. 10/620,710
Prelim. Amdt. dated June 14, 2004
Page 10

27. (New) The lead of claim 26, wherein the connector terminal further includes a fourth connector element and the auxiliary port further includes a fourth connector contact adapted to couple a fourth electrode of the other medical lead and further comprising a fifth insulated conductor coupling the fourth connector element to the fourth connector contact.
28. (New) The lead of claim 19, wherein the connector terminal further includes a third connector element and the auxiliary port further includes a second connector contact adapted to couple a second electrode of the other medical lead and further comprising a third insulated conductor coupling the third connector element to the second connector contact.
29. (New) The lead of claim 28, wherein the connector terminal further includes a fourth connector element and the auxiliary port further includes a third connector contact adapted to couple a third electrode of the other medical electrical lead and further comprising a fourth insulated conductor coupling the fourth connector element to the third connector contact.